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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,663	10/23/2001	Nick R. Mann	LIT-PI-544	5564

7590 04/08/2004

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EXAMINER

CINTINS, IVARS C

ART UNIT PAPER NUMBER

1724

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A&gt;

**Office Action Summary****Application No.**

10/021,663

**Applicant(s)**

MANN ET AL.

**Examiner**

Ivars C. Cintins

**Art Unit**

1724

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date <u>December 15, 2003</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u>.</p> |
|---|---|

Continuation of Attachment(s) 6). Other: copy of page 2 of 1449 dated Oct 23, 2001.

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Based on remarks presented on page 5 of the response filed December 15, 2003, it appears that Applicant has not received page 2 of the 1449 attached to the previous Office action. Accordingly, a copy of this page is attached to this Office action.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 38-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Mann et al. (U.S. Patent No. 6,514,566). As pointed out in the previous Office action, the reference discloses an ion processing system comprising a column assembly having an inlet and an outlet, which column assembly contains a composite medium of the type recited (see col. 5, lines 3-11; col. 6, lines 32-37; and col. 14, line 5). Furthermore, the composite medium of this reference system comprises a plurality of discrete uniformly sized spherical particles **304** with openings therebetween (see Fig. 2); and this is all that is required by claims 38-47 and 49-52. This reference also includes a mechanical filter (see col. 10, line 53); and this is all that is further required by claim 48. Applicant should note that claims 38-52 recite “comprising” language (see line 3 of claims 38 and 42); and therefore, these claims do not preclude the presence of the substrate material **302** of the reference system.

Applicant's arguments filed Applicant's arguments filed December 15, 2003 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that “the Mann Patent” does not anticipate the claimed invention because this reference

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discloses a porous substrate having the pores impregnated with a composite medium, whereas the claims require that the composite medium comprise a plurality of discrete particles arranged to define a plurality of openings therebetween. It is pointed out, however, that the reference system also employs a composite medium comprised of discrete particles (i.e. **304**) having a plurality of openings therebetween (see Fig. 2). The fact that a substrate (i.e. **302**) is impregnated with these composite medium particles in the reference system is not deemed to be significant, since the claims do not preclude the presence of this substrate, as explained above.

Applicant has stated that the present application and the Mann Patent were, at the time the invention of the present application was made, owned by or subject to an obligation of assignment to Lockheed Martin Idaho Technologies Company. It is pointed out, however, that while such a statement may disqualify a reference under 35 U.S.C. 103(a) based upon 35 U.S.C. 102(e), it has no effect on the above rejection under 35 U.S.C. 102(e). As Applicant is well aware, subject matter that qualifies as anticipatory prior art under 35 U.S.C. 102, including 35 U.S.C. 102(e), is not affected by a showing of common ownership, and may still be used to reject claims as being anticipated.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (571) 272-1156.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
April 4, 2004